

**Shri Krishan Chander GDC Poonch
(Autonomous)**

BA/B.Sc Honours (FYUGP)

in

**INFORMATION TECHNOLOGY
(ARTS/SCIENCE)**

SYLLABUS

**Four Year Undergraduate Programme
As per NEP 2020 guidelines**

**FOR THE STUDENTS TO BE ADMITTED IN THE SESSIONS
2026-27, 2027-28, 2028-29**

COURSES OF STUDY

Semester –I

S. No	Course Type	Course Code	Course Title	Credits	Marks				Total Marks
					Theory		Practical/Tutorial		
					Mid Semester	End Exam	Assessment	Exam	
1	MAJOR (Theory)	UMJITTH-101	Fundamentals of IT	4	20	80	-	-	100
2	MAJOR (Practical)	UMJITPR-111	Foundations of IT	2	-	-	25	25	50
3	Minor (Theory)	UMIITTH-121	Basics of Computation	4	20	80	-	-	100
4	Minor (Practical)	UMIITPR-131	Office Tools	2	-	-	25	25	50
5	MD	UMDTH-141	Understanding IT Basics and Applications	3	15	60			75
6	SEC	USEITPR-151	Cyber Security-I	3	-	-	35	40	75

Semester –II

S. No	Course Type	Course Code	Course Title	Credits	Marks				Total Marks
					Theory		Practical/Tutorial		
					Mid Semester	End Exam	Assessment	Exam	
1	MAJOR (Theory)	UMJITTH-201	Internet and Web designing	4	20	80	-	-	100
2	MAJOR (Practical)	UMJITPR-211	HTML Programming	2	-	-	25	25	50
3	Minor (Theory)	UMIITTH-221	Programming Concepts and Paradigms	4	20	80	-	-	100
4	Minor (Practical)	UMIITPR-231	Computer Programming	2	-	-	25	25	50
5	MD	UMDTH-241	Internet & Web Technologies	3	15	60	-	-	75
6	SEC	USEITPR-251	Cyber Security-II	3	-	-	35	40	75



SCHEME OF EXAMINATION

Each course shall be comprised of Mid Semester Assessment Test and End-Semester Examination. The responsibility of conduct and evaluation of the Mid Semester Assessment test lies with the Course Coordinator. The End Semester Examination shall be conducted by the college and question papers shall get set by the Controller of Examinations. The Mid Semester Assessment marks awarded to the students in each course shall be displayed on the notice board well in advance, at least one week before the commencement of End Semester examination. The 03/04 and 02 credits paper shall have 04 and 02 units, respectively. Four credits paper will have 100 Marks for theory and two credits paper will have 50 Marks for practical/tutorial. The break-up for 75 Marks for theory paper shall contain 15 Marks for Mid Semester Assessment Test and 60 Marks for End semester Examination. There will be continuous assessment of 25 Marks and final examination of 25 Marks for Practical/Tutorial component in each course. The 03 credits paper shall be of 75 Marks consisting of 60 Marks for external examination and 15 Marks for Mid Semester Assessment test. All 02 credits courses shall be of 50 marks comprising 25 marks for External examination and 25 Marks for Mid Semester Assessment Test.



The image shows two rows of handwritten signatures. The top row contains seven signatures, and the bottom row contains six signatures. The signatures are in various colors (black, blue, red) and styles. The bottom row includes a stamp of the Controller of Examinations, Shri Krishan Chander GDC Poonch, with the text 'Controller of Examinations' and 'Shri Krishan Chander GDC Poonch' visible.

Syllabus of BA/B.Sc Honours (FYUGP) in Information Technology
INFORMATION TECHNOLOGY (ARTS/SCIENCE)
FIRST SEMESTER

Course Title: Fundamentals of IT

Course Type: Major

Course Code: UMJITTH 101

Course Credits: (04)

Internal Assessment: 20 Marks (1.5 hours)

End Semester Examination: 80 Marks (3 hours)

Total Marks: 100

For examinations to be held in Dec 2027, 2028, and 2029

Course objectives & learning outcomes:

1. To learn the fundamentals of Information Technology.
2. To gain knowledge of various Input output devices'
3. To learn the basics of Operating systems and networking concepts
4. To brief the students about DOS & Windows.

UNIT - I

Basics of Information Technology: Data, Information, Information Technology, Components of Computer System: CPU, ALU, Control Unit, Registers, Block Diagram of Computer, Booting process, Characteristics of computers, History of Computers, Application of computers. (15 Hours)

UNIT. II

Hardware: Input Devices: Keyboard, Mouse, Trackball, Joystick, Scanner, Barcode Reader, OCR, OMR, MICR, Touch Screen, Touchpad, Stylus/Digital Pen, Biometric Devices (Fingerprint and Iris Scanner), Web Camera, Microphone, Smart Card Reader, NFC Devices, GPS Receiver, IoT Sensor-Based Input Devices. Output Devices: Monitor Printers (Impact and Non-impact), Plotters, Projectors, Speakers

Software: Types of Software: System Software, Application Software. Memory: Types of memory: RAM, types of RAM, ROM, Types of ROM, optical Disk, flash Drive, Memory Hierarchy.

(15 Hours)

UNIT.III

Operating system: Introduction, functions of Operating System, types of Operating system, Single user, Multiuser, Multitasking, time Sharing operating System, functions of Operating System

Overview of Artificial Intelligence : AI Applications in Daily Life ,Machine Learning Generative AI ,Chatbots and Virtual Assistants (e.g., ChatGPT, Google Gemini, Microsoft Copilot) , Ethical Use of AI, Responsible AI and Limitations of AI (15 Hours)

UNIT.IV

Anatomy of Window: Introduction to Windows Environment :Desktop, Taskbar, Start Menu and File Explorer ,File and Folder Management (Create, Copy, Move, Rename, Delete, Compress and Extract Files) Search, Sort, Filter and Organize Files and Folders, **File** Properties, Hidden Files and File Permissions, Control Panel and Windows Settings ,Installing, Updating and Uninstalling Software Managing User Accounts and Passwords , Managing Storage Devices (USB Drives, External Hard Disks and SSDs) Basic Troubleshooting: Disk cleanup and defragmentation, Virus scanning, System utilities usage

(15 Hours)

A row of handwritten signatures in blue ink, likely representing the faculty members who approved the syllabus. The signatures are varied in style and are placed above a horizontal line.

Suggested readings/ references:

1. Peter Norton's, "Introduction to Computer", TMH
2. Chetan Shrivastava "Fundamentals of Information Technology", Kalyani Publishers
3. Dr Madhulikajain, "Information Technology Concept", BPB
4. Alexis and Mathews Leon, "Fundamentals of Information Technology", Leon Press
5. P.K Sinha & Priti Sinha, Computer Fundamentals, BPB Publications.

Syllabus of BA/B.Sc Honours (FYUGP) in Information Technology
INFORMATION TECHNOLOGY (ARTS/SCIENCE)

Testing and Evaluation:

Examination Pattern shall be as under:

1. 20 marks shall be earmarked for Internal Assessment (05 Marks for Attendance and 15 Marks for Assessment Test).

2. Scheme for award of marks for attendance:

- | | |
|---------------------------|------------|
| a. Attendance of 75-80 % | = 01 Marks |
| b. Attendance of 81-85 % | = 02 Marks |
| c. Attendance of 86-90 % | = 03 Marks |
| d. Attendance of 91-95 % | = 04 Marks |
| e. Attendance of 96-100 % | = 05 Marks |

3. Pattern of Internal Assessment Test of 15 marks:

The test shall comprise of two sections:

- i. SECTION-A (Short Answer Type questions)
Attempt any five Questions of 02 Marks each out of eight Questions. (5x2=10 Marks)
- ii. SECTION-B (Long Answer Type questions)
Attempt any one Question of 05 Marks out of two Questions. (1x5=5 Marks)

4. Pattern of External End-Semester Examination of 80 marks:

- a. The Paper shall comprise of three Sections:
 - i. SECTION-A (Very short Answer Type Questions)
 1. 06 questions of 01 mark each. 6x1=6 marks
 2. 05 questions of 02 mark each. 5x2=10 marks
 - ii. SECTION-B (Short Answer Type Questions)
 1. Total 08 questions (02 Questions from each unit) of 04 marks each.
 2. Attempt any one Question from each Unit. 4x4=16 marks
 - iii. SECTION-C (Long Answer Type Questions)
 1. Total 08 questions (02 Questions from each unit) of 12 marks each.
 2. Attempt any one Question from each Unit. 4x12=48 marks



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Syllabus of BA/B.Sc Honours (FYUGP) in Information Technology **INFORMATION TECHNOLOGY (ARTS/SCIENCE)**

FIRST SEMESTER

Course Title: Foundations of IT

Course Code: UMJITPR-111

Internal Assessment: 25 Marks (1.5 hours)

End Semester Examination: 25 Marks (1.5 hours)

Total Marks: 50

Course Type: Major

Course Credits: (02)

For examinations to be held in Dec 2027, 2028, and 2029

Course objectives & learning outcomes:

1. To identify basic computer hardware and software components.
2. To perform file and system management operations.
3. To use operating system utilities and commands.
4. To access and utilize Internet and e-mail services.
5. To apply fundamental IT skills in academic and workplace settings.

UNIT – I

Computer Hardware and System Operations: Identification of computer components, input/output devices, storage devices, memory devices, computer booting, hardware configuration, software installation, and file management. (30 Hours)

UNIT – II

Operating System and Internet Applications: Desktop Elements, Icons, Windows environment, Control Panel, system utilities, Basic Troubleshooting: Disk cleanup and defragmentation, Virus scanning, System utilities usage, Internet browsing, e-mail operations, network settings, cloud storage, and digital communication tools.

(30 Hours)

The image shows two rows of handwritten signatures in blue ink. The first row contains eight signatures, and the second row contains five signatures. Below the second row, there is a circular official stamp of Shri Krishan Chander GDC Poonch, which includes the text 'Shri Krishan Chander GDC Poonch', 'Autonomous', 'University of Jammu', and 'Jammu, Jammu & Kashmir, India'.

Syllabus of BA/B.Sc Honours (FYUGP) in Information Technology INFORMATION TECHNOLOGY (ARTS/SCIENCE)

FIRST SEMESTER

Examination Pattern shall be as under:

1. 25 marks shall be earmarked for Internal Practical Examination

- a) 05 Marks for Attendance.
- b) 10 Marks for Practical Test.
- c) 05 Marks for Project Report.
- d) 05 Marks for Viva/ Presentation.

2. 25 marks shall be earmarked for External Practical Examination

- a. 10 Marks for Practical Test.
- b. 05 Marks for Project Report.
- c. 05 Marks for Implementation.
- d. 05 Marks for Viva/ Presentation.

(External Examiner shall be appointed by the principal of the College).

3. Scheme for award of marks for attendance:

- a. Attendance of 75-80 % = 01 Marks
- b. Attendance of 81-85 % = 02 Marks
- c. Attendance of 86-90 % = 03 Marks
- d. Attendance of 91-95 % = 04 Marks
- e. Attendance of 96-100 % = 05 Marks

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Syllabus of BA/B.Sc Honours (FYUGP) in Information Technology INFORMATION TECHNOLOGY (ARTS/SCIENCE)

FIRST SEMESTER

Course Title: Basics of Computation

Course Code: UMIITTH-121

Internal Assessment: 20 Marks (1.5 hours)

End Semester Examination: 80 Marks (3 hours)

Total Marks: 100

Course Type: Minor

Course Credits: (04)

For examinations to be held in Dec 2027, 2028, and 2029

Course Objectives

1. To introduce students to the fundamental concepts of computers and their applications in various fields.
2. To develop and understanding of input/output devices, memory, and software systems.
3. To familiarize students with operating systems and office automation tools.
4. To build basics skills for practical usage of MS Office and system operations.
5. To enable students to understand number systems and data representation techniques.

Learning Outcomes

1. Define and recall basic computer terminology, components, and functions.
2. Explain the working of computer systems, input/output devices, and operating systems.
3. Use MS Word, Excel, and PowerPoint for creating documents, spreadsheets, and presentations.
4. Differentiate between types of computers, software, memory units, and number systems.
5. Assess the performance and suitability of different computing tools and technologies.
6. Develop structured documents, datasheets, and presentations using appropriate software tools.

UNIT I

Computer and its Characteristics, Applications of Computer, Block Diagram of a Computer, Digital and Analog Computers, Generations of Computers, Types of Computers (Super, Mainframe, Mini, Micro).

Memory hierarchy: Registers, Cache, Primary Memory (RAM, ROM, PROM, EPROM, EEPROM), Secondary Storage Devices (Hard Disk, Optical disk, blue ray disk, pen drives).
Storage Units: Bit, Byte, KB, MB, GB. (15 Hours)

UNIT II

Input Devices: Keyboard, Mouse, Trackball, Joystick, Scanner, Barcode Reader, OCR, OMR, MICR, Light Pen, Digitizers, Touchpad, Stylus/Digital Pen, Biometric Devices (Fingerprint and Iris Scanner), Web Camera, Microphone, Smart Card Reader, NFC Devices, GPS Receiver, IoT Sensor-Based Input Devices.

Output Devices: Monitor (CRT, LCD, LED), Printers (Impact and Non-impact), Plotters, Projectors, Speakers. Complete working, advantages, disadvantages, and applications of I/O devices.

I/O Interfaces and Ports: USB, HDMI, Serial and Parallel ports. Data Representation and Multimedia Devices. (15 Hours)

Syllabus of BA/B.Sc Honours (FYUGP) in Information Technology INFORMATION TECHNOLOGY (ARTS/SCIENCE)

UNIT III

Software and its Types: System Software, Application Software, Firmware. Operating System: Functions and Types (Single user, Multi-user, Multitasking, Batch, Real-Time). Computer Languages: Machine, Assembly, High-Level Languages. Translators: Compiler, Interpreter, Assembler, Linker, Loader. Computer Virus: Types, Prevention, Antivirus Software. Overview of Artificial Intelligence : AI Applications in Daily Life ,Machine Learning Generative AI ,Chatbots and Virtual Assistants (e.g., ChatGPT, Google Gemini, Microsoft Copilot)

(15 Hours)

UNIT IV

Number System: Decimal Number System, Binary Number System, Octal Number System, Hexadecimal Number System, Conversion from one number system to another. Floating, Point Representation. Arithmetic operations in binary (Addition, Subtraction, Multiplication, Division). Complement methods (1's Complement, 2's Complement, r and r-1 Complement).

(15 Hours)

Suggested readings/ references:

1. P.K Sinha & Priti Sinha, Computer Fundamentals, BPB Publications.
2. Alexix Leon, Mathewes Leon, Fundamentals of Information Technology,
3. Suresh K. Basandra, Computer Systems Today, Galgotia Publications.
4. V. Rajaraman, Fundamentals of Computers, EEE.
5. Peter Norton, Introduction to Computers, Tata Mcgraw Hill
6. Joyce Coax, Joan Preppernau, Steve Lambert and Curtis Frye,2007 Microsoft Office System step by step, Microsoft Press.
7. R.K. Taxali, PC Software for Windows

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Syllabus of BA/B.Sc Honours (FYUGP) in Information Technology INFORMATION TECHNOLOGY (ARTS/SCIENCE)

Testing and Evaluation:

Examination Pattern shall be as under:

1. 20 marks shall be earmarked for Internal Assessment (05 Marks for Attendance and 15 Marks for Assessment Test).

2. Scheme for award of marks for attendance:

- | | |
|---------------------------|------------|
| a. Attendance of 75-80 % | = 01 Marks |
| b. Attendance of 81-85 % | = 02 Marks |
| c. Attendance of 86-90 % | = 03 Marks |
| d. Attendance of 91-95 % | = 04 Marks |
| e. Attendance of 96-100 % | = 05 Marks |

3. Pattern of Internal Assessment Test of 15 marks:

The test shall comprise of two sections:

i. SECTION-A (Short Answer Type questions)

Attempt any five Questions of 02 Marks each out of eight Questions. (5x2=10 Marks)

ii. SECTION-B (Long Answer Type questions)

Attempt any one Question of 05 Marks out of two Questions. (1x5=5 Marks)

4. Pattern of External End-Semester Examination of 80 marks:

a. The Paper shall comprise of three Sections:

i. SECTION-A (Very short Answer Type Questions)

1. 06 questions of 01 mark each. 6x1=6 marks

2. 05 questions of 02 mark each. 5x2=10 marks

ii. SECTION-B(Short Answer Type Questions)

1. Total 08 questions (02 Questions from each unit) of 04 marks each.

2. Attempt any one Question from each Unit. 4x4=16 marks

iii. SECTION-C (Long Answer Type Questions)

1. Total 08 questions (02 Questions from each unit) of 12 marks each.

2. Attempt any one Question from each Unit. 4x12=48 marks

Syllabus of BA/B.Sc Honours (FYUGP) in Information Technology
INFORMATION TECHNOLOGY (ARTS/SCIENCE)
FIRST SEMESTER

Course Title: Office Tools

Course Type: MINOR

Course Code: UMIITPR-131

Course Credits: (02) Internal Practical Examination: 25 Marks

External Practical Examination: 25 Marks

Total Marks: 50

For examinations to be held in Dec 2027, 2028, and 2029

Course Objectives

1. To develop practical skills in MS Word, Excel, and PowerPoint.
2. To enable students to create, edit, and format documents and reports.
3. To introduce data handling, formulas, and charting techniques in Excel.
4. To build the ability to design effective presentations using PowerPoint.
5. To provide hands-on experience with Windows operating system.
6. To develop skills in file and folder management.
7. To familiarize students with DOS commands and system utilities.
8. To enable basic system maintenance and troubleshooting skills.

Learning Outcomes

1. Identify features and components of MS Word, Excel, and PowerPoint.
2. Explain formatting tools, functions, and presentation elements.
3. Create formatted documents, spreadsheets with formulas, and presentations.
4. Compare different tools and functions within MS Office applications.
5. Assess the quality and effectiveness of documents, spreadsheets, and presentations.
6. Design professional documents, data sheets, and presentations for real world tasks.
7. List common Windows features and DOS commands.
8. Perform file operations and execute DOS commands effectively.

UNIT I

MS Word: Create, edit and format documents, working with fonts, paragraphs, page setup, Tables, images, WordArt and shapes, Mail Merge.

MS Excel: Worksheets and workbooks, Formulas and functions (SUM, AVERAGE, IF), Charts and graphs, Data sorting and filtering.

MS PowerPoint: Creating presentations, Slide layouts and design, Animations and transitions, Slide show setup.

(30 Hours)

UNIT II

Windows: - File and folder management, Control Panel operations, Installing/uninstalling software,

Windows: - File and folder management, Control Panel operations, Installing/uninstalling software,

Basic Troubleshooting: Disk cleanup and defragmentation, Virus scanning, System utilities usage.

(30 Hours)

Syllabus of BA/B.Sc Honours (FYUGP) in Information Technology INFORMATION TECHNOLOGY (ARTS/SCIENCE)

(30 Hours)

Examination Pattern shall be as under:

1. 25 marks shall be earmarked for Internal Practical Examination

- e) 05 Marks for Attendance.
- f) 10 Marks for Practical Test.
- g) 05 Marks for Project Report.
- h) 05 Marks for Viva/ Presentation.

2. 25 marks shall be earmarked for External Practical Examination

- e. 10 Marks for Practical Test.
- f. 05 Marks for Project Report.
- g. 05 Marks for Implementation.
- h. 05 Marks for Viva/ Presentation.

(External Examiner shall be appointed by the principal of the College).

3. Scheme for award of marks for attendance:

- a. Attendance of 75-80 % = 01 Marks
- b. Attendance of 81-85 % = 02 Marks
- c. Attendance of 86-90 % = 03 Marks
- d. Attendance of 91-95 % = 04 Marks
- e. Attendance of 96-100 % = 05 Marks

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Syllabus of BA/B.Sc Honours (FYUGP) in Information Technology **INFORMATION TECHNOLOGY (ARTS/SCIENCE)**

FIRST SEMESTER

Course Title: Understanding IT Basics and Applications

Course Type: Multidisciplinary

Course Code: UMDITTH-141

Course Credits: (03)

Internal Assessment: 15 Marks (1.5 hours)

End Semester Examination: 60 Marks (3.0 hours)

Total Marks: 75

For examinations to be held in Dec 2027, 2028, and 2029

Course objectives & Learning outcomes:

1. To learn the fundamentals of Information Technology.
2. To gain knowledge of various Input output devices.
3. To learn the basics of Operating systems.
4. To brief the students about e-commerce.

UNIT - I

Information Technology Basics: Data, information, Information technology, Components of Computer System: CPU, ALU, Control Unit, Registers, Booting process, Characteristics of computers, History of Computers, Application of computers, Role of IT in Online Teaching - Learning. Storage Fundamentals: Primary Vs Secondary Storage, Primary Storage: RAM ROM, PROM, EPROM, EEPROM. Secondary Storage: hard disks, Optical Disks, Compact Disks, Zip Drive, Flash Drives. 10 Hours

UNIT II

Input Devices: Keyboard, Mouse, Trackball, Joystick, Scanner, Barcode Reader, OCR, OMR, MICR, Touchpad, Stylus/Digital Pen, Biometric Devices (Fingerprint and Iris Scanner), Web Camera, Microphone, Smart Card Reader, NFC Devices, GPS Receiver, IoT Sensor-Based Input Devices. Output Devices: Monitor (CRT, LCD, LED), Printers (Impact and Non-impact), Plotters, Projectors, Speakers. Detailed working, advantages, disadvantages, and applications of each device. Role of I/O devices in a computer system. 10 Hours

UNIT III

Software and its Types: System Software, Application Software, Firmware. Operating System: Functions and Types (Single user, Multi-user, Multitasking, Batch, Real-Time). Computer Languages: Machine, Assembly, High-Level Languages. Translators: Compiler, Interpreter, Assembler, Linker, Loader. Computer Virus: Types, Prevention, Antivirus Software. Overview of Artificial Intelligence : AI Applications in Daily Life ,Machine Learning Generative AI ,Chatbots and Virtual Assistants (e.g., ChatGPT, Google Gemini, Microsoft Copilot) 10 Hours

UNIT- IV

Introduction to Electronic Payment System and its types, Strategies for developing electronic commerce web sites, Net marketplaces- characteristics of net marketplaces, types of net marketplaces, E-distributors, E procurement, Exchanges. Online content providers- digital copyrights & electronic publishing. 15 Hours

Suggested readings/ references:

1. Chetan Shrivastava "Fundamentals of Information Technology", Kalyani publishers
2. Dr Madhulika Jain, "Information Technology Concept", BPB
- 3' Alexis and Mathews Leon, "Fundamentals of Information Technology", Leon Press
4. P.K. Sinha "Computer Fundamentals", BPB publications
5. V.Rajaraman "Fundamentals of Computers", PHI Learning

Syllabus of BA/B.Sc Honours (FYUGP) in Information Technology INFORMATION TECHNOLOGY (ARTS/SCIENCE)

Examination Pattern shall be as under:

1. 15 marks shall be earmarked for Internal Assessment (05 Marks for Attendance and 10 Marks for Assessment Test).

2. Scheme for award of marks for attendance:

- a. Attendance of 75-80 % = 01 Marks
- b. Attendance of 81-85 % = 02 Marks
- c. Attendance of 86-90 % = 03 Marks
- d. Attendance of 91-95 % = 04 Marks
- e. Attendance of 96-100 % = 05 Marks

3. Pattern of Internal Assessment Test of 10 marks:

- a. The test shall comprise of two sections:
 - i. SECTION-A (Short Answer Type questions)
 - 1. Attempt any five Questions of 1 Marks each out of Six Questions. (5x1=05 Marks)
 - ii. SECTION-B (Long Answer Type questions)
 - 1. Attempt any one Question of 05 Marks out of two Questions. (1x5=5 Marks)

4. Pattern of External End-Semester Examination of 60 marks:

- a. The Paper shall comprise of two Sections:
 - i. SECTION-A(Short Answer Type Questions)
 - 1. 04 questions having one Question from each Unit of 03 marks. 4x3=12 marks
 - ii. SECTION-B (Long Answer Type Questions)
 - 1. Total 08 questions having 02 Questions from each unit of 12 marks.
 - 2. Attempt any one Question from each Unit. 4x12=48 marks




Syllabus of BA/B.Sc Honours (FYUGP) in Information Technology
INFORMATION TECHNOLOGY (ARTS/SCIENCE)
FIRST SEMESTER

Course Title: Cyber Security-I

Course Type: SEC

Course Code: USEITPR-151

Course Credits: (03)

Internal Assessment: 35 Marks (1.5 hours)

End Semester Examination: 40 Marks (2 hours)

Total Marks: 75

For examinations to be held in Dec 2027, 2028, and 2029

Course objectives & learning outcomes:

1. To understand the fundamental concepts, principles, and significance of Cyber Security.
2. To identify common cyber threats, vulnerabilities, and attack techniques.
3. To apply cyber hygiene practices for secure use of digital technologies.
4. To demonstrate knowledge of operating system and network security mechanisms.
5. To implement basic data protection, backup, and recovery measures.
6. To analyze security risks in personal and organizational computing environments.
7. To develop a security-conscious approach for safe and responsible use of cyberspace.

Unit-I

Introduction to Cyber Security Cyber Security: Concepts and Importance, Information Security Principles (CIA Triad), Cyber Threats and Vulnerabilities, Types of Malware, Phishing and Social Engineering, Denial of Service (DoS) Attacks, Ransomware Attacks, Cyber Security Frameworks, Risk Assessment Basics, Cyber Security. (15 hours)

Unit-II

Operating System and Network Security: Basics of Operating Systems Security, User and Access Management, Linux Security Fundamentals, Windows Security Features, Network Components and Architecture, IP Addressing and DNS Security, Firewalls and Their Types, Intrusion Detection Systems (IDS), Intrusion Prevention Systems (IPS), Secure Network Configuration. (30 hours)

Unit-III

Cyber Hygiene and Data Protection: Password Security Practices, Multi-Factor Authentication, Secure Web Browsing, Email Security, Data Privacy Concepts, Data Backup Strategies, Recovery and Restoration Techniques, Safe Use of Social Media, Mobile Device Security, Personal Cyber Security Practices. (30 hours)

Suggested readings/ references:

1. Nina Godbole & Sunit Belapure , Cyber Security: Understanding Cyber Crimes, Computer Forensics and Legal Perspectives, Wiley India.
2. Atul Kahate, Cryptography and Network Security, McGraw-Hill Education.
3. William Stallings & Lawrie Brown, Computer Security: Principles and Practice, Pearson Education.
4. Michael E. Whitman & Herbert J. Mattord, Principles of Information Security, Cengage Learning.
5. Charles J. Brooks, Christopher Grow, Philip Craig & Donald Short, Cyber Security Essentials, Wiley.
6. Behrouz A. Forouzan, Data Communications and Networking, McGraw-Hill Education.



Syllabus of BA/B.Sc Honours (FYUGP) in Information Technology **INFORMATION TECHNOLOGY (ARTS/SCIENCE)**

Testing and Evaluation:

Examination Pattern shall be as under:

1. 35 marks shall be earmarked for Internal Assessment (05 Marks for and 30 Marks for Assessment Test).

2. Scheme for award of marks for attendance:

- Attendance of 75-80 % = 01 Marks
- Attendance of 81-85 % = 02 Marks
- Attendance of 86-90 % = 03 Marks
- Attendance of 91-95 % = 04 Marks
- Attendance of 96-100 % = 05 Marks

3. Pattern of Internal Assessment Test of 30 marks:

- The test shall comprise of two sections:
 - SECTION-A (Short Answer Type questions)
 - Attempt any five Questions of 03 Marks each out of Seven Questions. (5x3=15 Marks)
 - SECTION-B(Long Answer Type questions)
 - Attempt any two Question of 7.5 Marks out of four Questions. (2x7.5=15 Marks)

4. Pattern of External End-Semester Examination of 40 marks:

- The Paper shall comprise of two Sections:
 - SECTION-A (Short Answer Type Questions)
 - 05 questions of 02 marks each. 5x2=10 marks
 - SECTION-B (Long Answer Type Questions)
 - Total 06 questions having 02 Questions from each unit of 10 marks.
 - Attempt any one Question from each Unit. 3x10=30 Marks



Department of Higher Secondary and Higher Education
Government of Jammu and Kashmir
Jammu

Syllabus of BA/B.Sc Honours (FYUGP) in Information Technology **INFORMATION TECHNOLOGY (ARTS/SCIENCE)**

SECOND SEMESTER

Course Title: Internet and Web designing

Course Type: Major

Course Code: UMJITTH-201

Course Credits: (04)

Internal Assessment: 20 Marks (1.5 hours)

End Semester Examination: 80 Marks (3 hours)

Total Marks: 100

For examinations to be held in May 2027, 2028, and 2029

Course Objectives

1. To develop understanding of computer networks and Internet fundamentals.
2. To explain Internet structure, evolution, and web technologies.
3. To introduce Internet protocols and addressing mechanisms.
4. To build foundational knowledge of HTML for web development.

Learning Outcomes

1. Describe networking concepts and Internet architecture.
2. Explain web technologies and Internet services.
3. Analyze different Internet protocols and IP addressing.
4. Create structured web pages using HTML fundamentals.

UNIT I

Internet: History of Internet, working of Internet, how to use Internet, Prerequisites for using Internet, ISP, types of ISP, Types of Networks: LAN, MAN, WAN, Network devices: Router, Switch, bridge, hub, gateway, Repeater, Ethernet Internet Protocols: TCP/IP, FTP, HTTP, IP Address, MAC Address, Connecting to Internet, Advantages and disadvantages of using Internet. (15 Hours)

UNIT II

Applications of Internet WWW, VoIP, Chat, email, etc., Introduction and architecture of WWW, Client, Browser, Server, Uniform Resource Locator (URL), Cookies. Internet versus WWW, DNS, Web Documents: Static Documents, Dynamic Documents, Active Documents. (15 Hours)

UNIT III

IP Addressing, Definition and purpose, IPv4 structure (32-bit addressing), IPv6 structure (128-bit addressing), Differences between IPv4 and IPv6, Classes of IP Address (Class A, B, C, D, E), Public vs Private IP, Protocols and their Functions, HTTP & HTTPS (Web communication), FTP, SMTP, POP3, Internet Connection Concepts: Dial-up, Broadband, Wireless, Basics of data transmission in Internet. (15 Hours)

UNIT IV

Introduction to HTML, Definition and features, Role in web development, Structure of HTML Document, HTML, HEAD, BODY tags, Basic syntax, HTML Tags, Basic Tags (Heading, Paragraph, Break, Horizontal line), Formatting Tags (Bold, Italic, Underline, Font), HTML Lists: Ordered List, Unordered List, Definition List, HTML Elements, Images and Image Mapping, Div and Span (Grouping elements). (15 Hours)

Suggested readings/ references:

1. Andrew S. Tanenbaum, Computer Networks, Pearson
2. William Stallings, Data and Computer Communication, Pearson
3. Forouzan, Data Communication and Networking, McGraw Hill
4. Douglas E. Comer, The Internet Book, Prentice Hall
5. Jon Duckett, "HTML and CSS: Design and Build Websites, Wiley

Syllabus of BA/B.Sc Honours (FYUGP) in Information Technology INFORMATION TECHNOLOGY (ARTS/SCIENCE)

Testing and Evaluation:

Examination Pattern shall be as under:

1. 20 marks shall be earmarked for Internal Assessment (05 Marks for Attendance and 15 Marks for Assessment Test).

2. Scheme for award of marks for attendance:

- | | |
|---------------------------|------------|
| a. Attendance of 75-80 % | = 01 Marks |
| b. Attendance of 81-85 % | = 02 Marks |
| c. Attendance of 86-90 % | = 03 Marks |
| d. Attendance of 91-95 % | = 04 Marks |
| e. Attendance of 96-100 % | = 05 Marks |

3. Pattern of Internal Assessment Test of 15 marks:

The test shall comprise of two sections:

- i. SECTION-A (Short Answer Type questions)
Attempt any five Questions of 02 Marks each out of eight Questions. (5x2=10 Marks)
- ii. SECTION-B (Long Answer Type questions)
Attempt any one Question of 05 Marks out of two Questions. (1x5=5 Marks)

4. Pattern of External End-Semester Examination of 80 marks:

- a. The Paper shall comprise of three Sections:
 - i. SECTION-A (Very short Answer Type Questions)
 1. 06 questions of 01 mark each. 6x1=6 marks
 2. 05 questions of 02 mark each. 5x2=10 marks
 - ii. SECTION-B (Short Answer Type Questions)
 1. Total 08 questions (02 Questions from each unit) of 04 marks each.
 2. Attempt any one Question from each Unit. 4x4=16 marks
 - iii. SECTION-C (Long Answer Type Questions)
 1. Total 08 questions (02 Questions from each unit) of 12 marks each.
 2. Attempt any one Question from each Unit. 4x12=48 marks

Syllabus of BA/B.Sc Honours (FYUGP) in Information Technology INFORMATION TECHNOLOGY (ARTS/SCIENCE)

SECOND SEMESTER

Course Title: HTML Programming

Course Code: UMJITPR-211

Internal Assessment: 25 Marks (1.5 hours)

End Semester Examination: 25 Marks (1.5 hours)

Total Marks: 50

Course Type: Major

Course Credits: (02)

For examinations to be held in May 2027, 2028, and 2029

Course Objectives

1. To develop hands-on skills in HTML web page design.
2. To create structured layouts using tables and frames.
3. To design interactive web forms for user input.

Learning Outcomes

1. Design web pages using HTML tables and layouts.
2. Implement frames and embed content using frames.
3. Create interactive forms for data collection.
4. Apply basic validation and user interface design principles.

UNIT I

HTML Tables, Table creation (TABLE, TR, TH, TD), Table attributes (Border, Bgcolor, Align), Cell spacing and padding, Rowspan and Colspan, Frames and Layouts, Frame and Frameset, Frame attributes, Iframe and embedding external content, create timetable using tables, Design webpage layout using frames. (30 Hours)

UNIT II

HTML Forms, Form structure and attributes (Action, Method, Name), Form Controls, Textbox, Password field, Checkboxes, Radio buttons, Select (Dropdown), File upload, Hidden fields, Buttons (Submit, Reset), Basic Form Design, User-friendly interface, Simple validation concepts

(30 Hours)



Handwritten signatures of faculty members and an official stamp of Shri Krishan Chander GDC Poonch (Autonomous).

Syllabus of BA/B.Sc Honours (FYUGP) in Information Technology
INFORMATION TECHNOLOGY (ARTS/SCIENCE)

SECOND SEMESTER

Examination Pattern shall be as under:

1. 25 marks shall be earmarked for Internal Practical Examination

- a. 05 Marks for Attendance.
- b. 10 Marks for Practical Test.
- c. 05 Marks for Project Report.
- d. 05 Marks for Viva/ Presentation.

2. 25 marks shall be earmarked for External Practical Examination

- a. 10 Marks for Practical Test.
- b. 05 Marks for Project Report.
- c. 05 Marks for Implementation.
- d. 05 Marks for Viva/ Presentation.

(External Examiner shall be appointed by the principal of the College).

3. Scheme for award of marks for attendance:

- a. Attendance of 75-80 % = 01 Marks
- b. Attendance of 81-85 % = 02 Marks
- c. Attendance of 86-90 % = 03 Marks
- d. Attendance of 91-95 % = 04 Marks
- e. Attendance of 96-100 % = 05 Marks

A row of handwritten signatures in blue ink, likely representing faculty members or officials of the college. The signatures are varied in style and are placed above a horizontal line.

Syllabus of BA/B.Sc Honours (FYUGP) in Information Technology INFORMATION TECHNOLOGY (ARTS/SCIENCE)

SECOND SEMESTER

Course Title: Programming Concepts and Paradigms

Course Code: UMIITTH-221

Internal Assessment: 20 Marks (1.5 hours)

End Semester Examination: 80 Marks (3 hours)

Total Marks: 100

Course Type: Minor

Course Credits: (04)

For examinations to be held in May 2027, 2028, and 2029

Course objectives & learning outcomes:

1. To learn the basic fundamentals of programming.
2. To gain knowledge of various programming paradigms and their types
3. To learn the basics techniques of problem solving
4. To brief the students about algorithmic design

UNIT - I

Introduction: Program, Programming Language, Evolution of programming languages: machine language, Assembly language, High Level language, Compiler, Interpreter, Assembler, Loader, Linker, Debugger, IDE, Source Code, object code, Basic Operations of a programming Environment, Selection of a programming language. (15 Hours)

UNIT-II

Programming language paradigms: Paradigm, Imperative programming paradigm, procedural paradigm, Object oriented Paradigm, Declarative Programming Paradigm, Logic Programming paradigm, Functional Programming Paradigm, Introduction to Concurrent Programming, Parallelism in Hardware, Advantages and limitations of Imperative and Declarative Paradigms. (15 Hours)

UNIT.III

Basic Techniques of problem solving: Flowchart: symbols used in flowchart, terminator, process, document, decision, data, on-page reference, off-page reference, flow, drawing flowcharts for problem solving. (15 Hours)

UNIT - IV

Problem Solving Techniques: -Algorithms: characteristics of Algorithms, steps in designing an algorithm, designing at least 10 algorithms for computational problems. Pseudocode: Advantages of writing pseudo code, Examples of pseudocode. (15 Hours)

Suggested readings/ references:

7. Ravi Sethi, "Programming Languages, Concepts & Constructs", Pearson Education
2. Freidman, Wand, Haynes, "Essentials of Programming Language", PHI.
3. Robert .W. Sebesta, "Concepts of Programming Languages", Pearson Education
4. Watt, "Programming languages", Wiley,
5. Louden, "Programming Languages", Cengage
6. Anthony A, Aaby, "Theory Introduction to Programming Languages"



Syllabus of BA/B.Sc Honours (FYUGP) in Information Technology INFORMATION TECHNOLOGY (ARTS/SCIENCE)

Testing and Evaluation:

Examination Pattern shall be as under:

1. 20 marks shall be earmarked for Internal Assessment (05 Marks for Attendance and 15 Marks for Assessment Test).

2. Scheme for award of marks for attendance:

- | | |
|---------------------------|------------|
| a. Attendance of 75-80 % | = 01 Marks |
| b. Attendance of 81-85 % | = 02 Marks |
| c. Attendance of 86-90 % | = 03 Marks |
| d. Attendance of 91-95 % | = 04 Marks |
| e. Attendance of 96-100 % | = 05 Marks |

3. Pattern of Internal Assessment Test of 15 marks:

The test shall comprise of two sections:

i. SECTION-A (Short Answer Type questions)

Attempt any five Questions of 02 Marks each out of eight Questions. (5x2=10 Marks)

ii. SECTION-B (Long Answer Type questions)

Attempt any one Question of 05 Marks out of two Questions. (1x5=5 Marks)

4. Pattern of External End-Semester Examination of 80 marks:

a. The Paper shall comprise of three Sections:

i. SECTION-A (Very short Answer Type Questions)

1. 06 questions of 01 mark each. 6x1=6 marks

2. 05 questions of 02 mark each. 5x2=10 marks

ii. SECTION-B (Short Answer Type Questions)

1. Total 08 questions (02 Questions from each unit) of 04 marks each.

2. Attempt any one Question from each Unit. 4x4=16 marks

iii. SECTION-C (Long Answer Type Questions)

1. Total 08 questions (02 Questions from each unit) of 12 marks each.

2. Attempt any one Question from each Unit. 4x12=48 marks



A row of handwritten signatures in blue ink, likely representing the faculty members involved in the syllabus preparation or approval.

Syllabus of BA/B.Sc Honours (FYUGP) in Information Technology **INFORMATION TECHNOLOGY (ARTS/SCIENCE)**

SECOND SEMESTER

Course Title: Computer Programming

Course Code: UMIITPR-231

Internal Assessment: 25 Marks (1.5 hours)

End Semester Examination: 25 Marks (1.5 hours)

Total Marks: 50

Course Type: Minor

Course Credits: (02)

For examinations to be held in May 2027, 2028, and 2029

Course Objectives & Learning Outcomes

1. To develop logical and problem-solving skills.
2. To design algorithms and flowcharts for computational problems.
3. To write pseudocode for simple programming tasks.
4. To use programming tools and debugging techniques.
5. To apply programming concepts to solve real-world problems.

UNIT – I

Programming Tools and Program Development: Familiarization with IDE, source code creation, compilation and execution of programs, use of compiler and debugger, error identification and correction, program testing, documentation, and implementation of simple arithmetic and logical problems. (30 Hours)

UNIT – II

Algorithms, Flowcharts and Pseudocode: Design of algorithms, drawing flowcharts using standard symbols, writing pseudocode, development of algorithms for arithmetic, decision-making and iterative problems, conversion of algorithms to flowcharts and pseudocode, and problem-solving exercises. (30 Hours)



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Syllabus of BA/B.Sc Honours (FYUGP) in Information Technology
INFORMATION TECHNOLOGY (ARTS/SCIENCE)

SECOND SEMESTER

Examination Pattern shall be as under:

1. 25 marks shall be earmarked for Internal Practical Examination

- a. 05 Marks for Attendance.
- b. 10 Marks for Practical Test.
- c. 05 Marks for Project Report.
- d. 05 Marks for Viva/ Presentation.

2. 25 marks shall be earmarked for External Practical Examination

- a. 10 Marks for Practical Test.
- b. 05 Marks for Project Report.
- c. 05 Marks for Implementation.
- d. 05 Marks for Viva/ Presentation.

(External Examiner shall be appointed by the principal of the College).

3. Scheme for award of marks for attendance:

- a. Attendance of 75-80 % = 01 Marks
- b. Attendance of 81-85 % = 02 Marks
- c. Attendance of 86-90 % = 03 Marks
- d. Attendance of 91-95 % = 04 Marks
- e. Attendance of 96-100 % = 05 Marks



The image shows two rows of handwritten signatures in blue ink. The top row contains eight signatures, and the bottom row contains six signatures. In the center of the bottom row, there is a circular official stamp. The stamp contains the text: 'Shri Krishan Chander GDC Poonch', 'Department of Information Technology', 'Faculty of Arts and Social Sciences', and 'University of Jammu, Jammu, India'.

Syllabus of BA/B.Sc Honours (FYUGP) in Information Technology **INFORMATION TECHNOLOGY (ARTS/SCIENCE)**

SECOND SEMESTER

Course Title: Internet & Web Technologies

Course Code: UMDITPR-241

Internal Assessment: 15 Marks (1.5 hours)

End Semester Examination: 60 Marks (3.0 hours)

Total Marks: 75

Course Type: MD

Course Credits: (03)

For examinations to be held in May 2027, 2028, and 2029

Course Objectives

1. To develop understanding of computer networks and Internet fundamentals.
2. To explain Internet structure, evolution, and web technologies.
3. To introduce Internet protocols and addressing mechanisms.
4. To build foundational knowledge of HTML for web development.

Learning Outcomes

1. Describe networking concepts and Internet architecture.
2. Explain web technologies and Internet services.
3. Analyze different Internet protocols and IP addressing.
4. Create structured web pages using HTML fundamentals.

UNIT I

Network: Definition, Goals, Advantages and Disadvantages, Categories of Networks, Network Topologies, Data Communication and its Components (Sender, Receiver, Protocol, Message, Medium), Transmission Modes (Simplex, Half Duplex, Full Duplex), Transmission Media: Co-axial, Twisted Pair, Fiber Optics, Radio Waves, Microwaves, Satellites, Networking Devices: Modem, Switch, Hub, Router, Bridge, Gateway. (15 Hours)

UNIT II

Introduction to Internet, Definition and characteristics, Basic architecture of Internet, Client-server model, History and Evolution, Growth of Internet and WWW, Modern Internet trends, Applications of Internet, E-commerce and E-governance, Education (E- learning platforms), Social Networking, Advantages and Disadvantages, Web Terminologies, Web Browser (Types and functions), Web Address , URL structure, DNS (Domain Name System), Search Engines. (15 Hours)

UNIT III

IP Addressing, Definition and purpose, IPv4 structure (32-bit addressing), IPv6 structure (128-bit addressing), Differences between IPv4 and IPv6, Classes of IP Address (Class A, B, C, D, E), Public vs Private IP, Protocols and their Functions, HTTP & HTTPS (Web communication), FTP, SMTP, POP3, Internet Connection Concepts: Dial-up, Broadband, Wireless, Basics of data transmission in Internet. (15 Hours)

UNIT IV

Introduction to HTML, Definition and features, Role in web development, Structure of HTML Document, HTML, HEAD, BODY tags, Basic syntax, HTML Tags, Basic Tags (Heading, Paragraph, Break, Horizontal line), Formatting Tags (Bold, Italic, Underline, Font), HTML Lists: Ordered List, Unordered List, Definition List, HTML Elements, Images and Image Mapping, Div and Span (Grouping elements). (15 Hours)

Suggested Books/References:

1. Andrew S. Tanenbaum, Computer Networks, Pearson
2. William Stallings, Data and Computer Communication, Pearson
3. Forouzan, Data Communication and Networking, McGraw Hill
4. Douglas E. Comer, The Internet Book, Prentice Hall

Syllabus of BA/B.Sc Honours (FYUGP) in Information Technology INFORMATION TECHNOLOGY (ARTS/SCIENCE)

Examination Pattern shall be as under:

1. 15 marks shall be earmarked for Internal Assessment (05 Marks for Attendance and 10 Marks for Assessment Test).

2. Scheme for award of marks for attendance:

- Attendance of 75-80 % = 01 Marks
- Attendance of 81-85 % = 02 Marks
- Attendance of 86-90 % = 03 Marks
- Attendance of 91-95 % = 04 Marks
- Attendance of 96-100 % = 05 Marks

3. Pattern of Internal Assessment Test of 10 marks:

- The test shall comprise of two sections:
 - SECTION-A (Short Answer Type questions)
 - Attempt any five Questions of 1 Marks each out of Six Questions. (5x1=05 Marks)
 - SECTION-B (Long Answer Type questions)
 - Attempt any one Question of 05 Marks out of two Questions. (1x5=5 Marks)

4. Pattern of External End-Semester Examination of 60 marks:

- The Paper shall comprise of two Sections:
 - SECTION-A(Short Answer Type Questions)
 - 04 questions having one Question from each Unit of 03 marks. 4x3=12 marks
 - SECTION-B (Long Answer Type Questions)
 - Total 08 questions having 02 Questions from each unit of 12 marks.
 - Attempt any one Question from each Unit. 4x12=48 marks



Handwritten signatures of faculty members and an official stamp of Shri Krishan Chander GDC Poonch (Autonomous).

Syllabus of BA/B.Sc Honours (FYUGP) in Information Technology
INFORMATION TECHNOLOGY (ARTS/SCIENCE)
SECOND SEMESTER

Course Title: Cyber Security-II

Course Type: SEC

Course Code: USEITPR-251

Course Credits: (03)

Internal Assessment: 35 Marks (1.5 hours)

End Semester Examination: 40 Marks (2 hours)

Total Marks: 75

For examinations to be held in Dec 2027, 2028, and 2029

Course objectives & learning outcomes:

1. To understand ethical hacking concepts, methodologies, and legal considerations.
2. To perform basic reconnaissance, scanning, and vulnerability assessment activities.
3. To identify common web application and network security vulnerabilities.
4. To apply defensive measures for mitigating cyber security threats and attacks.
5. To understand the processes involved in cyber incident response and management.
6. To demonstrate basic digital forensics techniques for evidence collection and analysis.
7. To develop practical skills for securing systems, networks, and digital resources.

Unit-I

Ethical Hacking Fundamentals, Introduction to Ethical Hacking, Hacking Life Cycle, Foot printing Techniques, Information Gathering, Reconnaissance Methods, Scanning Networks, Enumeration Techniques, Vulnerability Assessment, Security Testing Tools, Responsible Disclosure Practices (15 Hours)

Unit-II

Network and Web Security, Web Application Architecture, Web Security Fundamentals, SQL Injection Attacks, Cross-Site Scripting (XSS), Cross-Site, Request Forgery (CSRF), Session Management Security, HTTPS and SSL/TLS, Wireless Security Standards, Wi-Fi Security Threats, Secure Communication Protocols (30 Hours)

Unit-III

Incident Response and Digital Forensics, Cyber Incident Response Process, Incident Identification, Incident Containment Techniques, Incident Recovery Procedures, Digital Evidence Collection, Chain of Custody, Disk and Memory Forensics, Log Analysis, Forensic Investigation Tools, Incident Reporting and Documentation (30 Hours)

Suggested Books/References:

1. Nina Godbole and Sunit Belapure, Cyber Security: Understanding Cyber Crimes, Computer Forensics and Legal Perspectives, Wiley India.
2. Atul Kahate, Cryptography and Network Security, McGraw-Hill Education.
3. Michael T. Simpson, Kent Backman and James Corley, Hands-On Ethical Hacking and Network Defense, Cengage Learning.
4. William Stallings and Lawrie Brown, Computer Security: Principles and Practice, Pearson Education.
5. Jon Erickson, Hacking: The Art of Exploitation, No Starch Press.
6. Kevin Beaver, Hacking For Dummies, Wiley Publications.
7. Bill Nelson, Amelia Phillips and Christopher Steuart, Guide to Computer Forensics and Investigations, Cengage Learning.
8. J. Andress, Digital Forensics: An Introduction to Incident Response, Syngress Publication

Syllabus of BA/B.Sc Honours (FYUGP) in Information Technology

INFORMATION TECHNOLOGY (ARTS/SCIENCE)

Testing and Evaluation:

Examination Pattern shall be as under:

1. 35 marks shall be earmarked for Internal Assessment (05 Marks for and 30 Marks for Assessment Test).

2. Scheme for award of marks for attendance:

- Attendance of 75-80 % = 01 Marks
- Attendance of 81-85 % = 02 Marks
- Attendance of 86-90 % = 03 Marks
- Attendance of 91-95 % = 04 Marks
- Attendance of 96-100 % = 05 Marks

3. Pattern of Internal Assessment Test of 30 marks:

- The test shall comprise of two sections:
 - SECTION-A (Short Answer Type questions)
 - Attempt any five Questions of 03 Marks each out of Seven Questions. (5x3=15 Marks)
 - SECTION-B(Long Answer Type questions)
 - Attempt any two Question of 7.5 Marks out of four Questions. (2x7.5=15 Marks)

4. Pattern of External End-Semester Examination of 40 marks:

- The Paper shall comprise of two Sections:
 - SECTION-A (Short Answer Type Questions)
 - 05 questions of 02 marks each. 5x2=10 marks
 - SECTION-B (Long Answer Type Questions)
 - Total 06 questions having 02 Questions from each unit of 10 marks.
 - Attempt any one Question from each Unit. 3x10=30 Marks



A row of handwritten signatures in blue ink, likely representing faculty members or officials involved in the syllabus preparation or approval process.